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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,951	04/25/2001	Amos B. Smith III	4730-103 US	6213

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MATHEWS, COLLINS, SHEPHERD & GOULD, PA
100 THANET CR, SUITE 306
PRINCETON, NJ 08540

EXAMINER

EPPERSON, JON D

ART UNIT

PAPER NUMBER

1639

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary*File Copy*

Application No.

09/841,951

Applicant(s)

SMITH ET AL.

Examiner

Jon D Epperson

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1627 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The fax number is (703) 308-4315. A fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Andrew Wang, Supervisory Patent Examiner, at (703) 306-3217. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Please note: The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to **Group Art Unit 1639**.

Please note: In preparing this Restriction Requirement the Examiner noted a problem with claims 9-15. Claim 9-15 depend on claim 7; however, the claims refer to method steps in claim 8 e.g., claim 14 refers to method step (h), which does not exist in claim 7 or claim 1 from which claim 7 depends. It would assist the further examination of this case on the merits if applicant could correct and/or address this problem in the Response to this action by changing claims 9-15 to depend on claim 8 instead of claim 7. The Examiner has interpreted claims 9-15 to depend on claim 8. If this is not the case a supplemental restriction will be sent out after applicant's response to correct for the error.

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

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- I. Claims 1-7, drawn to a method for preparing polypyrrolinone compounds having formula (38) in solution, classified variously in class 514, subclass 422; class 548, subclass 519.
- II. Claims 8-15, drawn to a method for preparing pyrrolinone compounds having formula (44) on solid-phase, classified variously in class 585, subclass 428; class 435, DIG 40; class 514, subclass 422; class 548, subclass 519.

2. The inventions are distinct, each from the other because of the following reasons:

3. Groups I and II are directed to separate and distinct methods. The methods are different because they use different steps, require different reagents and/or will produce different results. In the instant case, the method of Group II employs solid-phase synthesis, whereas the method of Group I does not. Consequently, examining Groups I and II together will require searching different reagents, different method steps, and different products, which will fall under different US classification numbers. Therefore, searching Groups I-II together would represent an undue search burden. In addition, art anticipating or rendering obvious Group I would not render obvious Group II, because they are drawn to different inventions that have different distinguishing features and/or characteristics (the molecules used in each method have different structures). Each group will support separate patents. Therefore, Groups I and II have different issues regarding patentability and enablement and represent patentably distinct subject matter.

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4. These inventions have acquired a separate status in the art as shown by their different classification and/or divergent subject matter. The different methods and products would require completely different searches in both the patent and non-patent databases, and there is no expectation that the searches would be coextensive. Therefore, this does create an undue search burden, and restriction for examination purposes as indicated is proper.

5. This application contains claims directed to patentably distinct species of the claimed invention for Groups I-II. Election is required as follows.

6. If applicant elects the invention of Group I, applicant is required to elect from the following patentably distinct species. Claim 1 is generic.

Subgroup 1: Species of polypyrrolinone having the formula (38) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the "polypyrrolinone having the formula (38)" wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the polypyrrolinone having the formula (38). Applicant should not use notations like R, R₁, R₂, R₃, R₄ or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 2: Species of compound having the formula (39) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the "compound having the formula (39)" wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (39). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 3: Species of compound having the formula (40) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (40)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (40). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 4: Species of compound having the formula (41) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (41)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (41). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 5: Species of compound having the formula (42) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (42)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (42). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 6: Species of compound having the formula (43) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (43)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (43). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

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Subgroup 7: Species of oxidizing reagents (see claims 1, 4, 5)

Applicant must elect, for the purposes of search, a single species of oxidizing reagents e.g., oxalyl chloride a specific tertiary amine (e.g., DBU or di-iso-propylethylamine, see claim 5) and DMSO. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 8: Species of crown ether (see claims 1, 6)

Applicant must elect, for the purposes of search, a single species of crown ether if “optionally” present e.g., 18-crown-6. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 9: Species of base (see claims 1, 7)

Applicant must elect, for the purposes of search, a single species of base e.g., potassium hexamethyldisilazane. Furthermore, applicant must indicate which claims read on the elected species.

7. If applicant elects the invention of Group II, applicant is required to elect from the following patentably distinct species. Claim 8 is generic.

Subgroup 1: Species of polypyrrolinone having the formula (38) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “polypyrrolinone having the formula (38)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the polypyrrolinone having the formula (38). Applicant should not use notations like R, R₁, R₂, R₃, R₄ or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 2: Species of compound having the formula (39) (see claim 1)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (39)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (39). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅,

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R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 3: Species of compound having the formula (40) (see claim 8)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (40)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (40). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 4: Species of compound having the formula (41) (see claim 8)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (41)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (41). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 5: Species of compound having the formula (42) (see claim 8)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (42)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (42). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 6: Species of compound having the formula (43) (see claim 8)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (43)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (43). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅,

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R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 7: Species of oxidizing reagents (see claim 9)

Applicant must elect, for the purposes of search, a single species of oxidizing reagents e.g., oxalyl chloride a specific tertiary amine (e.g., DBU or di-iso-propylethylamine, see claim 5) and DMSO. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 8: Species of crown ether (see claim 11)

Applicant must elect, for the purposes of search, a single species of crown ether if “optionally” present e.g., 18-crown-6. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 9: Species of base (see claim 10)

Applicant must elect, for the purposes of search, a single species of base e.g., potassium hexamethyldisilazane. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 10: Species of compound having the formula (44) (see claim 8)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (44)” wherein a specific structure is set forth, which clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (44). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 11: Species of solid-support (see claim 8)

Applicant must elect, for the purposes of search, a single species of solid-support. Furthermore, applicant must indicate which claims read on the elected species.

Subgroup 12: Species of compound having the formula (45) (see claim 14)

Applicant must elect, for the purposes of search, a single species corresponding to the “compound having the formula (45)” wherein a specific structure is set forth, which

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clearly shows all of the atoms and bonds that are necessary to define the compound having the formula (45). Applicant should not use notations like R, R₁, R₂, R₃, R₄, R₅, R₆, R₇, m or n when identifying the elected structure because these letters represent groups with variable members and, as a result, more than one species would be erroneously elected. Furthermore, applicant must indicate which claims read on the elected species.

8. The species are distinct, each from the other, because their structures and modes of action are different. They would also differ in their reactivity and the starting materials from which they are made. For different species of method, the method steps for each species would differ. Moreover, the above species can be separately classified. Consequently, the species have different issues regarding patentability and represent patentably distinct subject matter. Therefore, this does create an undue search burden, and election for examination purposes as indicated is proper.

9. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

10. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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11. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

12. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

13. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.43). Because the above restriction/election requirement is complex, a telephone call to applicants to request an oral election was not made. See MPEP § 812.01.

14. Applicant is reminded that upon cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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15. Applicant is also reminded that a 1 – month (not less than 30 days) shortened statutory period will be set for response when a written requirement is made without an action on the merits. This period may be extended under the provisions of 37 CFR 1.136(a). Such action will not be an “action on the merits” for purposes of the second action final program, see MPEP 809.02(a).

Conclusion

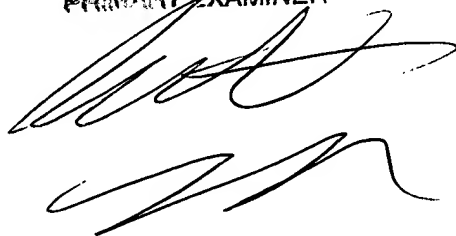
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon D Epperson whose telephone number is (703) 308-2423. The examiner can normally be reached Monday through Friday from 8:30 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Andrew Wang, can be reached on (703) 306-3217. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2439.

Jon D. Epperson, Ph.D.
January 12, 2003

BENNETT CELSA
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Bennett Celsa', is written over the printed name and title.

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